



INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P/63564/GPTU73	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/GB 03/01373	International filing date (day/month/year) 28.03.2003	Priority date (day/month/year) 28.03.2002
International Patent Classification (IPC) or both national classification and IPC H04L12/24		
Applicant MARCONI UK INTELLECTUAL PROPERTY LTD et al.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(II) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand 20.10.2003	Date of completion of this report 29.04.2004	
Name and mailing address of the International preliminary examining authority:  European Patent Office D-80298 Munich Tel: +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Bub, A Telephone No. +49 89 2399-7209 	

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I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-24 as originally filed

Claims, Numbers

1-8 as originally filed

Drawings, Sheets

1/9-7/9, 9/9 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 5

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the said claims Nos.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the Standard.

☐ the computer readable form has not been furnished or does not comply with the Standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-4, 6-8
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-4, 6-8
Industrial applicability (IA)	Yes: Claims	1-4, 6-8
	No: Claims	

2. Citations and explanations

see separate sheet

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Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Dependent claim 5 defines to reconfigure connections "but not every time in all ways possible". This formulation is so vague so that the reader of the claim is in doubt for which extent protection is thought. In effect, claim 5, taken as a whole, is considered so unclear in the sense of Article 6 PCT, so that it is impossible to establish an opinion on the defined subject-matter.

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

- D1: MUKHERJEE S ET AL: 'An adaptive connection admission control policy for VBRservice class' INFOCOM '98. SEVENTEENTH ANNUAL JOINT CONFERENCE OF THE IEEE COMPUTER AND COMMUNICATIONS SOCIETIES. PROCEEDINGS. IEEE SAN FRANCISCO, CA, USA 29 MARCH-2 APRIL 1998, NEW YORK, NY, USA, IEEE, US, 29 March 1998 (1998-03-29), pages 849-857, XP010270413 ISBN: 0-7803-4383-2
- D2: LE BODIC G ET AL: 'Resource cost and QoS achievement in a contract-based resource manager for mobile communications systems' IEEE JOURNAL, 2000, pages 392-397, XP010515108
- D3: DEVALLA B ET AL: 'Adaptive connection admission control for mission critical real-time communication networks' MILITARY COMMUNICATIONS CONFERENCE, 1998. MILCOM 98. PROCEEDINGS., IEEE BOSTON, MA, USA 18-21 OCT. 1998, NEW YORK, NY, USA, IEEE, US, 18 October 1998 (1998-10-18), pages 614-620, XP010307857 ISBN: 0-7803-4506-1
- D4: SAHOO A ET AL: 'Adaptive connection management for mission critical applications over ATM networks' AEROSPACE AND ELECTRONICS CONFERENCE, 1998. NAECON 1998. PROCEEDINGS OF THE IEEE 1998 NATIONAL DAYTON, OH, USA 13-17 JULY 1998, NEW YORK, NY, USA, IEEE,

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US, 13 July 1998 (1998-07-13), pages 128-135, XP010298934 ISBN: 0-7803-4449-9

2. Independent claims

2.1. Independent claim 1

The present application does not meet the requirements of Article 33(3) PCT, because the subject-matter of claim 1 is not considered to be involve an inventive step.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

A communications system comprising: a communications network comprising network nodes and network links between the network nodes; said connections utilizing network nodes and network links, in respect of each said connection there being a number of possible ways to implement the connection on the network (implicitly disclosed by the presence of "ATM networks" in D1, abstract),

when allocating a connection to the network, selecting one of the said number of possible ways to implement that connection (D1; abstract, "bandwidth renegotiation"),

when deciding whether to accept or reject a request for a said connection on said network, having the option to accommodate said request to reconfigure existing connection reconfigured (D1, abstract, "dynamic resource partitioning and dynamic resource redistribution among active connections"), a different one of the said number of possible ways to implement that connection, the reconfiguration being constrained to a set of possible reconfigurations which is a subset of the set of all possible reconfigurations of said existing connections on the network (D1, page 852, right-hand-column, line 9-13, "The new connection admission uses β fraction of the available resource and the rest is used for renegotiation. By adjusting β dynamically with the load and demand on the system, new admissions are regulated.").

The only difference between the disclosure of D1 and the subject-matter of independent claim 1 is that a network management system allocates the connection.

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The problem to be solved is considered as to determine an instance to allocate the connection. It is generally known that either a network management system can do the configuration as well as the network elements itself configure the new connection.

The feature of executing the renegotiation by the network management system is therefore merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to solve the problem posed.

Furthermore, the formulation "having the option" is **not clear** in the sense of Article 6 PCT, because it is not clear which options in total are available. There is only defined "having the option to accommodate", but no further options are defined.

Additionally, the formulation is **unclear**, because the scope of protection is not clearly defined. As the formulation includes both cases, to accommodate and not to accommodate, it has no limiting effect to the scope of protection. In conclusion, the definition lets the reader in doubt to which extent protection is sought and is therefore unclear according to Article 6 PCT.

Furthermore, the formulation "a different one of the said number of possible ways to implement" is **not clear**, because it is not clear, in which way is to be implemented. Additionally, it is not clear to which of the possible ways the other way differs. Therefore, the claim is considered unclear according to Article 6 PCT.

3. Dependent claims

Dependent claims 2-4 and 6-8 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the Art. 33(3) PCT in respect of inventive step, the reasons being as follows:

Claims 2 and 8 define to only reconfigure reconfigurable connections, which is considered to be obvious.

Claim 3 and 4 define to change either the route or wavelength of the connection which are considered to be obvious design options.

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Claim 6 defines to constrain the reconfiguration only to the standby path and not to the main path, which are considered obvious design options.

Claim 7 relates to having the option to choose both wavelength and route for implementing a connection, whereas for reconfiguration it is only possible to choose one of these parameters, which are considered to be obvious design options.

The formulation "it is possible" in dependent claim 7 is unclear, because the scope of protection is not clearly defined. As the formulation includes both cases, to choose or not to choose, it has no limiting effect to the scope of protection. In conclusion, the definition lets the reader in doubt to which extent protection is sought and is therefore unclear according to Article 6 PCT.

Certain defects in the International application

A. Sheet 8/9 (Figure 9) is missing in the application on file. Therefore, the description should be adapted accordingly (page 19, line 20 – page 22, line 16).

B. Any independent claim should be in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

C. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.

D. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).